## Raytheon

# **Stinger Missile**



#### **Stinger is the Answer**

- Lethal
- Survivable
- Agile
- Versatile
- Responsive
- Deployable
- Sustainable

#### **Benefits**

- Accurate and lethal against airborne targets
- Fire & Forget
- ▶ Two color IR/UV seeker
- Reprogrammable for new threats
- Multi-mission
- Combat proven
- Cost effective

Stinger is accurate and lethal against UAVs, helicopters, cruise missiles, and fixed wing aircraft

The Stinger is a lightweight fire and forget, two color, short range air defense missile designed for maximum lethality and survivability. The advanced passive two color IR/UV detector and advanced algorithms optimize target acquisition and ensure effectiveness against all known countermeasures. Stinger has embedded software to handle all known threats. In addition, the seeker combined with proportional navigation guidance allows the missile to acquire, track and engage targets at any aspect.

Stinger's high agility, supersonic speed and advanced guidance and control system maximize accuracy. Superior lethality is derived from hit-to-kill accuracy, a high explosive warhead and the

impact force of Stinger speeds up to Mach 2.0.

#### Stinger is multi-mission

Stinger is a versatile multi-mission weapon system and is deployed on over 2500 systems/platforms worldwide. The Stinger missile round is common to all of these platforms, and is used and interchanged without modification.

Ground-based units utilize Stinger for air defense missions in the Manportable Air Defense System (MANPADS) configuration or integrated on a variety of vehicles or ground mounts.

Aviation units utilize Stinger for counter air missions on helicopters, and Stinger integration can be expanded to UAVs and fixed wing aircraft.

Naval units utilize Stinger for surface protection missions on naval vessels.

# Stinger is a combat proven cost effective system

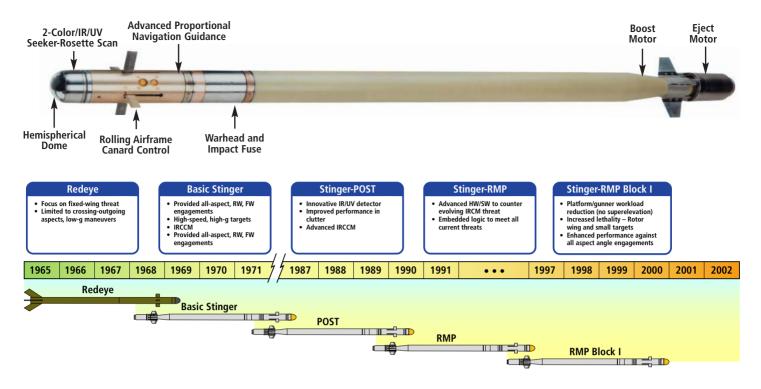
Stinger is a low cost system and has been in production since 1987 with over 44,000 missiles produced to date. Stinger has maintained a >90% success rate in tests against advanced threat targets.

Stinger is a certified missile round that requires no maintenance thus minimizing life cycle costs.

Stinger has been combat proven in four major conflicts and has over 270 fixed wing and rotary wing kills. In addition, Stinger is deployed in over 19 international countries, and the U.S. Army will maintain Stinger in their inventory until at least 2018.



### **Stinger Missile**



#### **Stinger Missile Characteristics**

- Two color detector with rosette scan allows the missile to effectively discriminate targets from IR countermeasures and background clutter
- Rosette scan seeker, roll frequency sensor, rolling airframe and advanced proportional navigation provide hit-to-kill guidance accuracy against a wide range of maneuvering and non-maneuvering targets
- Block I variants use a roll frequency sensor to provide trajectory shaping
- Hemispherical dome, optics design and two axis gimbal system provides acquisition and tracking throughout the entire field-of-regard
- High explosive impact/penetration warhead enhances missile lethality
- Eject motor ensures a safe separation distance from the soldier or platform before flight motor ignition
- Boost/sustain flight motor provides, and maintains, supersonic missile speeds resulting in high maneuver capability and significant kinematic energy at target intercept
- 1,500 + tests to date with >90% reliability

Stinger Missile			
Specifications			
Guidance:	Advanced Proportional Navigation Passive IR/UV Tracking Fire & Forget		
Seeker:			
Speed:	Supersonic		
Weight:	Missile	23 lb	10.1 kg
	Missile in Tube	28 lb	12.3 kg
Diameter:	Missile	2.75 in	6.9 cm
	Missile in Tube	2.87 in	7.3 cm
Length:	Missile	58 in	147 cm
	Missile in Tube	60 in	152 cm



#### **Land Combat**

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